

REMARKS

In the Office Action mailed 8/23/01, Claims 21, 29-35 and 38-40 were rejected as being anticipated by the prior art under 35 U.S.C. §102(b). Claims 21-40 were rejected as being obvious over the prior art under 35 U.S.C. § 103.

For the reasons set forth below, reconsideration of the rejections is requested and allowance of the present application is submitted to be in order.

Claim Rejections Under 35 USC §102(b)

Independent Claims 21, 29 and 35 and Dependent Claims 30-34 and 38-40 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kohler, U.S. Patent No. 5,115,236. Applicant respectfully traverses these rejections for the reasons set forth below after a review of the teachings of this reference.

The Rejections of Claims 21, 29-35 and 38-40 Under 35 USC §102(b) are improper

The Examiner asserts in his action that “Kohler teaches a device (Fig.2) for reducing power consumption in infrared-enabled appliances having power supply means and transceiver system means forming a circuit including switch means (Col. 1, lines 7-28 and Col. 2, lines 30-54), comprising: a discovery or (wakeup) signal receiver (RC receiver in Fig. 2) and power actuator module (control voltage output 41 in Fig. 2), said module configured to recognize incident Ir discovery signals and responsively activate said switch means (Col. 3, lines 53-68 through Col. 5, lines 1-22).” Applicant respectfully disagrees

with the Examiner's conclusion on at least two points: (1) Kohler does not comprise a "discovery signal" receiver and power actuator module, and (2) Kohler is not configured to recognize incident Ir discovery signals and responsively activate the switch means. In fact, the Kohler device is responsive to a "wakeup signal." The Kohler "wakeup signal" is not compliant with the Infrared Data Association Serial Infrared Link Access Protocol (known as the IRDA specification, previously submitted by Applicant in the Information Disclosure Statement filed with the original application). In fact, to be compliant with the IRDA specification, a device must use the "Discovery Signal" when seeking to establish communications with another infrared-enabled (and IRDA-compliant) device. The "Discovery Signal" is a signal of particular frequency and content, as specified by the IRDA specification.

The Examiner further states (at his page 3, first full paragraph) that "[a]lternatively, Kohler states that it is not necessarily the amplitude, which can be used to distinguish the wake up signal." Applicant disagrees with this assertion, and respectfully requests that the Examiner provide some reference to where Kohler makes such a statement. Applicant does acknowledge that at Column 3, line 34, Kohler indicates that "it [the "wake-up pulse"] may be wider than the other pulses, but it is preferably larger, as indicated at A in Fig. 1." In fact, the structure and operation taught by Kohler is a system that is "woken up" from a low-power-demand state by "an auxiliary wakeup pulse" that is generated by "a wakeup pulse detection circuit" "in response to each received wake up pulse." The structure as described in the Detailed Description and the Drawing Figures is one in which the "auxiliary pulse" is created when an incident infrared signal is of sufficient magnitude and duration; there is no distinction between infrared signals based upon their content. As such, an IRDA-compliant

Discovery Signal would not cause the Kohler device to react any differently than any other incident IRDA-compliant signal – this means that the Kohler device is not responsive to an IRDA-compliant Discovery Signal.

Applicant's Independent Claims 21, 29 and 35 recite structure, system and method, respectively, comprising (in pertinent part) a “module for detecting incident infrared signals and interpreting said incident signals that are essentially-IrDA-compliant Ir discovery signals.” As discussed above, the Kohler device fails to interpret incident signals as being essentially-IrDA compliant Ir Discovery Signals, and therefore each and every element of Applicant's Independent Claims 21, 29 and 35 are not anticipated and must be allowed. Since these independent claims are not anticipated, the Claims dependent thereon, namely Claims 30-34 and 38-40 by definition contain additional elements, and therefore they too cannot be anticipated and must be allowed.

Claim Rejections Under 35 USC §103(a)

Independent Claims 21, 29 and 35 and Dependent Claims 30-34 and 38-40 stand rejected under 35 U.S.C. §103(a) as being obvious over Kohler, U.S. Patent No. 5,115,236. Applicant respectfully traverses these rejections for the reasons set forth below.

The Rejections of Claims 21, 29-35 and 38-40 Under 35 USC §103(a) are improper

Applicant refers to the above discussion regarding the teachings of Kohler. The Examiner further “takes official notice that it is well within the skill level of one of ordinary skill in the art to compare the digital content of a received signal for distinguishing received signals and to use digital content as a distinguishing characteristic would have therefore

been obvious.” Again, Applicant respectfully disagrees. . As pointed out in the undersigned’s telephone discussion with the Examiner on September 24, 2001 (as summarized in the attached letter dated the same date), the IrDA specification does not provide for any low-power-demand state for compliant devices. As a result, the IrDA specification does not provide for any type of signal that will trigger a device that is in a low-power-demand state to transition to a full power mode. This is the significant problem with the specification (and therefore the operation of compliant devices) that is solved by Applicant’s invention. What is so valuable about Applicant’s solution is that the claimed invention complies with the IrDA specification while also creating added functionality; this means that all “legacy” devices (that are IrDA-compliant) will interact perfectly to cause a device of Applicant’s design to transition from the low-power-demand state to the full-power-demand state. This is certainly not the case with the Kohler device, since Kohler requires a non-IrDA-compliant “wake-up pulse.” Applicant therefore asserts that the Examiner acted improperly in taking official notice that it is well within the skill level of one of ordinary skill in the art to compare the digital content of a received signal for distinguishing received signals - for at least three reasons: (1) the Examiner has failed to provide any evidence of a prior device that recognizes digital content or frequency characteristics of a signal when the device is in a low-power-demand state; (2) the Examiner has failed to provide any evidence of a prior device that recognizes an essentially-IrDA compliant signal of any type when the device is in a low-power-demand state; and (3) the Examiner has failed to provide any evidence of a device that responds by switching from a low-power-demand state to a full-power-demand state when an essentially-IrDA compliant signal is detected by the device.

Since the Examiner, as asserted by Applicant, has erred in his taking of official notice, as well as his failure to provide any teaching, suggestion or hint in the prior art regarding the three points listed above, the Examiner has failed to meet his burden as required by 35 U.S.C. §103, and the subject claims must be allowed.

Independent Claims 21, 29 and 35 and Dependent Claims 30-34 and 36-40 also stand rejected under 35 U.S.C. §103(a) as being obvious over Kohler in view of Selin, EP Publication 0772307. Applicant respectfully traverses these rejections for the reasons set forth below.

Selin, EP 0772307

In his discussion, the Examiner refers to the teachings of Selin, EP 0772307 as “show[ing] a communication device which uses a sleep mode to reduce power consumption in the devices” by “us[ing] a specially coded signal or sequence to wake up a receiving communication unit” to support his conclusion that “it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a coded wake up sequence as suggested by Selin in the Kohler system because such would provide a simple and reliable data transfer.”

Even if Selin does disclose a device that wakes up in response to a “specially coded signal or sequence,” it certainly does not disclose, teach or hint at a device that wakes up in response to receiving an essentially-IrDA compliant signal. In fact, the Selin device can only receive and interpret signals when it is in a full-power-demand state; when the Selin device is in “sleep mode,” it actually “wakes up” to full power demand mode at some pre-

programmed automatic periodicity in order to potentially detect any incident signals. If no signal is detected during these short periods of full power mode, then the Selin device switches back to a low-power-demand state until it is time to temporarily “wake up” again. Just as with Kohler, therefore, Selin requires a special pulse or signal that is not compliant with the IrDA specification; as a result, neither Kohler nor Selin, nor the combination suggest a device that solves the significant problem that Applicant sought to (and does) solve with the claimed invention. Clearly then, neither Kohler nor Selin nor the combination suggest or hint at a device having the elements of Applicant’s subject claims, and the Examiner’s burden for rejecting these claims has not been met, and they therefore must be allowed.

For at least these reasons, Applicant submits that the independent claims are allowable over the cited references, and that the §103 rejections have been overcome. Further, Applicant respectfully asserts that the dependent claims are allowable for at least the reason that the independent claims from which they depend are allowable.¹

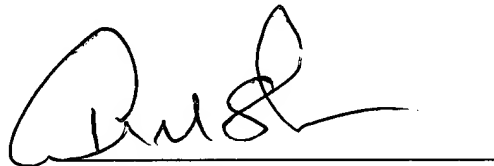
¹ 35 U.S.C. §103

Conclusion

In view of the foregoing remarks, Applicant respectfully requests that the application be reconsidered, the claims be allowed, and the case passed to issue. If any impediment to the allowance of the claims remains after consideration of this request for reconsideration, and such impediment could be alleviated during a telephone interview, the Examiner is invited to telephone the undersigned so that such issues may be resolved as expeditiously as possible.

Respectfully submitted,

STEINS & ASSOCIATES

A handwritten signature in black ink, appearing to read 'Karl M. Steins', written over a horizontal line.

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